## Attachment 2

## ADDITIONAL ADP STANDARDS UNDER DEVELOPMENT

The USA Standards Institute (USASI) Committees X3 and X4 have been working on computer and information processing and related equipment standards for approximately eight years. The X3 Committee has produced 25 approved standards with a greater number in various stages of processing. Most of these are potential candidates for Federal ADP standards. These approved and proposed standards range through character sets, codes, media, transmission conventions, programming languages, vocabulary, problem analysis, and data codes and data formats.

The Federal magnetic tape standard, 800 CPI, NRZI, identified in Attachment 1 is one of a family of three recorded magnetic tape standards. The other two members of the family are:

- a. The proposed USA Standard Recorded Magnetic Tape for Information Interchange, 200 CPI, NRZI, which is intended to provide a relatively low performance tape for low-cost systems use, and
- b. The proposed USA Standard Recorded Magnetic Tape for Information Interchange, 1600 CPI, Phase Encoded, which is intended to provide a relatively high performance tape for systems where such performance can be used effectively. It is based on phase encoding rather than non-return to zero type recording.

All three members of the family involve 9-track recording on one-half inch magnetic tape. Action to adopt the two additional members of the related family of magnetic tape standards as Federal standards can be expected at the earliest practical date.

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A proposed USA Standard Magnetic Tape Label for Information Interchange has been circulated to Government agencies for comment both as to its adoption as a USA standard and as a Federal ADP standard. Its approval as a USA standard seems assured. The standard label provides a method of describing the data format of the tape and should facilitate interchange of recorded magnetic tape reels. The response of Federal agencies to the adoption of the proposed label standard as a Federal standard was generally favorable.

A proposed USA Standard Hollerith Punched Card Code was also circulated to Government agencies for comment on adoption as both a USA and Federal standard. The response was quite favorable. This proposed standard is advancing in USASI and internationally. Approval as a Federal ADP standard appears warranted.

Work within an X3 subcommittee (X3.2) is well advanced on a proposed standard edge-punched card in which the ASCII code is punched along one edge of the card as on perforated tape. The proposed standard may offer significant economic advantages for use with low volume data transmission terminals since the format is the same as on perforated tape, and code translation is not required as is the case with Hollerith coded cards.

Government agencies have also been queried on USA approved or proposed standards related to optical character recognition, data transmission, COBOL programming language, and keyboards. Follow-on work on some of these queries is still underway. The Federal COBOL standard is well advanced.

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A data transmission control procedures proposal is nearing completion in an X3 subcommittee (X3.3).

Work is in early phases in Committees X3 and X4 on computer/ peripheral interfaces, data elements and code standardization, all aspects of credit card standardization, and special purpose punched cards.